

CLAIMS

1. An SC cut crystal resonator, wherein a surface of a quartz crystal orthogonal to a Y axis thereof is rotated through 33° to 35° about an X axis, and is then rotated from this
5 rotated position through 22° to 24° about a Z axis, and a slender quartz crystal blank oblong in an X' axis direction is cut from the rotated surface, and an end surface of said quartz crystal blank orthogonal to a Z' axis, has a tilt angle tilted in a direction rotated through a predetermined angle about the X' axis.
- 10 2. An SC cut crystal resonator according to claim 1, wherein said tilt angle is between $+7^{\circ}$ and $+13^{\circ}$.
3. An SC cut crystal resonator according to claim 1, wherein said tilt angle is between -7° and -13° .
- 15 4. An SC cut crystal resonator according to claim 1, wherein said tilt angle is between -9° and -11° .
5. An SC cut crystal resonator according to claim 1, wherein said tilt angle is between
20 $+9^{\circ}$ and $+11^{\circ}$.